



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,210	08/28/2001	Sang Min Lee	DMJOO2	4969

7590 06/30/2005

Delphine M. James
#170
2656 South Loop West
Houston, TX 77054

EXAMINER

DINH, DUC Q

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,210

Applicant(s)

LEE, SANG MIN

Examiner

DUC Q. DINH

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This is response to the Amendment filed on March 23,2005.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 13-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claim 13 recites the limitation "in the closed state, the side edges of the support base are adapted to slide into the guide members such that the keypad faces the top surfaces of the electronic housing". Although the specification page 9-10 does mention the arrangement of the electronic device, there is no support in the specification for the quoted limitation above. The examiner examines the application based on best understood of the claimed language.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandenburg et al. (U. S. Patent No. 6,665,173), hereinafter Brandenburg.

In reference to claim 1, Brandenburg discloses in Fig. 6 a handheld computer comprising: keyboard portion 807 having support base and a thumbboard 805 (corresponding to the keyboard) defined by a top surface, a bottom surface, a rear edge, a front edge and a pair of side edges, the thumb board overlaying the top surface of the support base as claimed. An electronic housing 801 having the same structure with the keyboard portion as shown in Fig. 6A. Fig. 6B shows the coupling structure of the keyboard portion and the display portion in an open or closed position such that the bottom surface of the electronic housing is parallel to the bottom surface of the support base as claimed (col. 11, lines 35-53). The device specifically comprising (1) an alphanumeric data input device, such as a full QWERTY-type keyboard or thumb board; (2) a display device, such as an LCD, LED... display screen; (3) a processor; (4) a power source... and (6) a physical housing that contains these components (corresponding to the electronic housing) and that consists of at least two discrete portions that may translate, rotate and/or pivot relative to one another, one portion containing a display device and one portion containing a keyboard (col. 7 line 60 – col. 8 line 5). Fig. 7D show a keyboard having first and second section having plurality of key and being in the form of complementary symmetrical and vertically parallel with the top surface of the keyboard portion.

In addition, Brandenburg discloses that the system also has a plurality of raised grips 621 (corresponding to the hand support means) may be integrated into protective bumpers 619 to facilitate handling of and interaction with device 601. However, Blandenberg does not disclose the raised grips being attached to a side edge of the display portion of the device. Fig. 5 shows

Art Unit: 2674

and touch pad on the backside of the device. The touch pad is located such that it can be utilized by the user while the device is in either closed state or open state (col. 11, lines 16-34)

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the grips of the system to provide the user hand support while using the touchpad in the back of the display as shown in Fig. 5B or holding the device while typing on the keyboard as shown in Fig. 4.

In reference to claim 2, Fig. 7 shows the appropriate standard QWERTY keyboard format on the left and right hand as claimed.

In reference to claims 3, and 21, Fig. 6 A and 6C show the strips surrounding the display which carries the additional input device such as joystick for the system as claimed.

In reference to claims 4 and 22, see the rejection of claim 1 for the LCD display as claimed.

In reference to claims 19 and 20, refer to the rejection as applied to claim 1.

6. Claims 7-10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blandenberg in view of Ni (U. S. Patent No. 6,297,752).

In reference to claim 7, refer to the rejection as applied to claim 1. However, Blandenburg does not disclose, the bottom surface of the electronic housing being securely attached to the bottom surface of the keyboard in an operable position. Ni discloses a backside keyboard for a notebook having bottom surface of the electronic housing being securely attached to the bottom surface of the keyboard as claimed.

Art Unit: 2674

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to learn the teaching of Ni, i.e., the bottom surface of the electronic housing being securely attached to the bottom surface of the keyboard in an operable position, so that the user has the same feel of location that occurs when the keyboard is on the top surface of the chassis thereby eliminating the strain caused by twisting the wrist to type in the state of the art (col. 2, lines 5-8).

In reference to claims 8-9, refer to the rejection as applied to claims 1-3.

In reference to claim 10, refer to the rejection as applied to claim 4.

In reference to claims 13 and 14, refer to the rejection of claim 1. In addition, Fig. 1-3 show an embodiment in which the keyboard portion and the display portion connected by sliding means which comprising bracket and guiding members for the system as claimed (see col. 9, lines 25-45). In addition, Ni shows the bottom surface of the keyboard and the bottom surface of the electronic housing are parallel to each other.

In reference to claim 15, refer to the rejection as applied to claim 3.

7. Claims 5, 11, 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blandenburg and Ni in view of Makala et al. (U. S. Patent No. 6,047,196).

In reference to claims 5, 11, 17 and 23, Blandenburg discloses in Fig. 4, plurality of input devices is provided in the boundary strips around the display device. For examples one boundary may be indicated by a "-" sign and the opposing end boundary may be indicated by a "+" sign (col. 10, lines 26-60). However, Blandenburg does not disclose the plurality of additional

Art Unit: 2674

alphanumeric key for the system. Makala discloses a portable device having the additional alphanumeric keys in the display portion in Fig. 1.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to learn the teaching of Makala, i.e.: providing additional alphanumeric key, in the boundary strips of the display device taught by Blandenburg so that device have more optional keys that can be used in the open position or in the closed position.

8. Claims 6, 12, 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blandenburg and Ni in view of Genest et al. (U. S. Patent No. 6,480,377) hereinafter Genest.

In reference to claim 6, 12, 18, and 24, Blandenburg and Ni fails to disclose a pressure sensitive means for allowing data to be input via handwriting and the pressure sensitive means overlapping the bottom of the display area. Genest discloses handheld computer having a display screen 32 is and LCD screen of the pressure sensitive type.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the pressure sensitive of Greenest in the device taught by Blandenburg and Ni because that would enable the user additional input data or commands into the system.

Response to Arguments

9. Applicant's arguments with respect to previous Office Action have been considered but not persuasive. With respect to claim 1, Fig. 6 C of the prior art of Blandenburg shows the bottom surface of the thumbboard is parallel to the bottom surface of the electronic housing with corresponding to either open or closed or open position as claimed (claim 1 does not defined in

Art Unit: 2674

what state the device is operable). With respect to the rejection applied to amended claims 7 and 17, see the rejections based on the newly discovered art of Ni.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DUC Q. DINH** whose telephone number is **(571) 272-7686**. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Edouard Patrick** can be reached on **(571)272-7603**.

Any response to this action should be mailed to:

Art Unit: 2674

Commissioner of Patents and Trademarks

Washington, D.C. 20231


Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,
Arlington, Va Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 305-4700.

DUC Q DINH
Examiner
Art Unit 2674


REGINA LIANG
PRIMARY EXAMINER

DQD
June 26, 2005